OIPE
SEP 12 2005
PATENT & TRADEMARK OFFICE

1/5

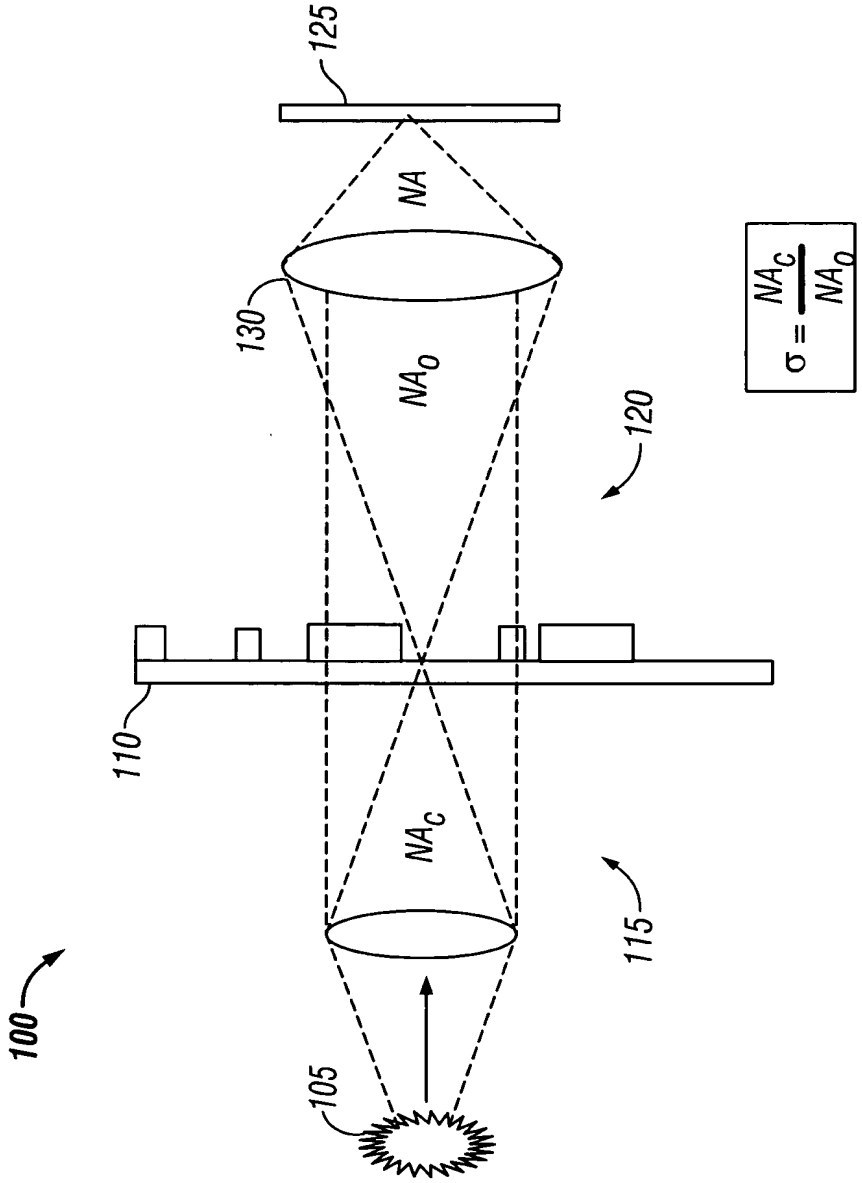

FIG. 1

2/5

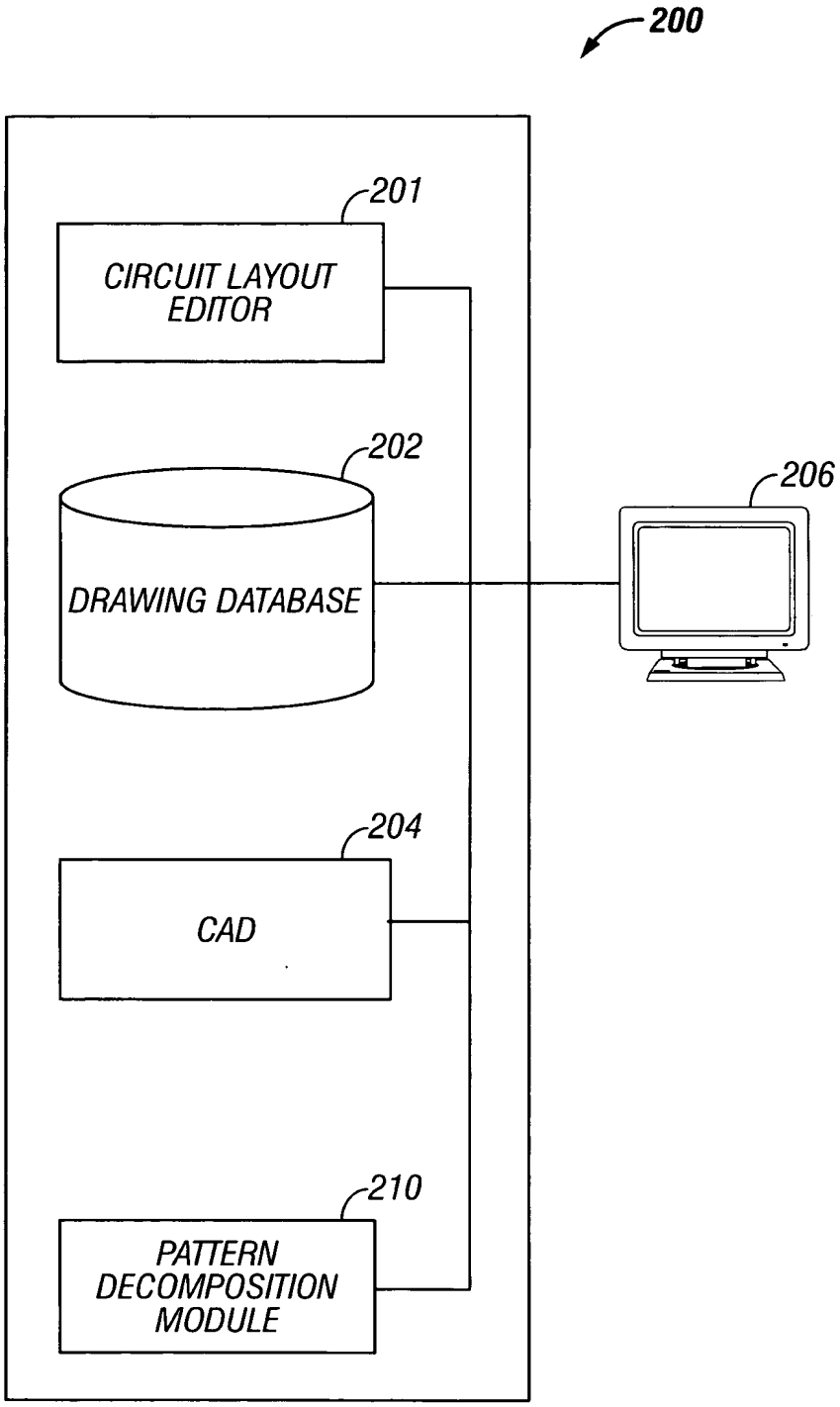
200
201
CIRCUIT LAYOUT EDITOR
202
DRAWING DATABASE
206
204
CAD
210
PATTERN DECOMPOSITION MODULE

FIG. 2

3/5

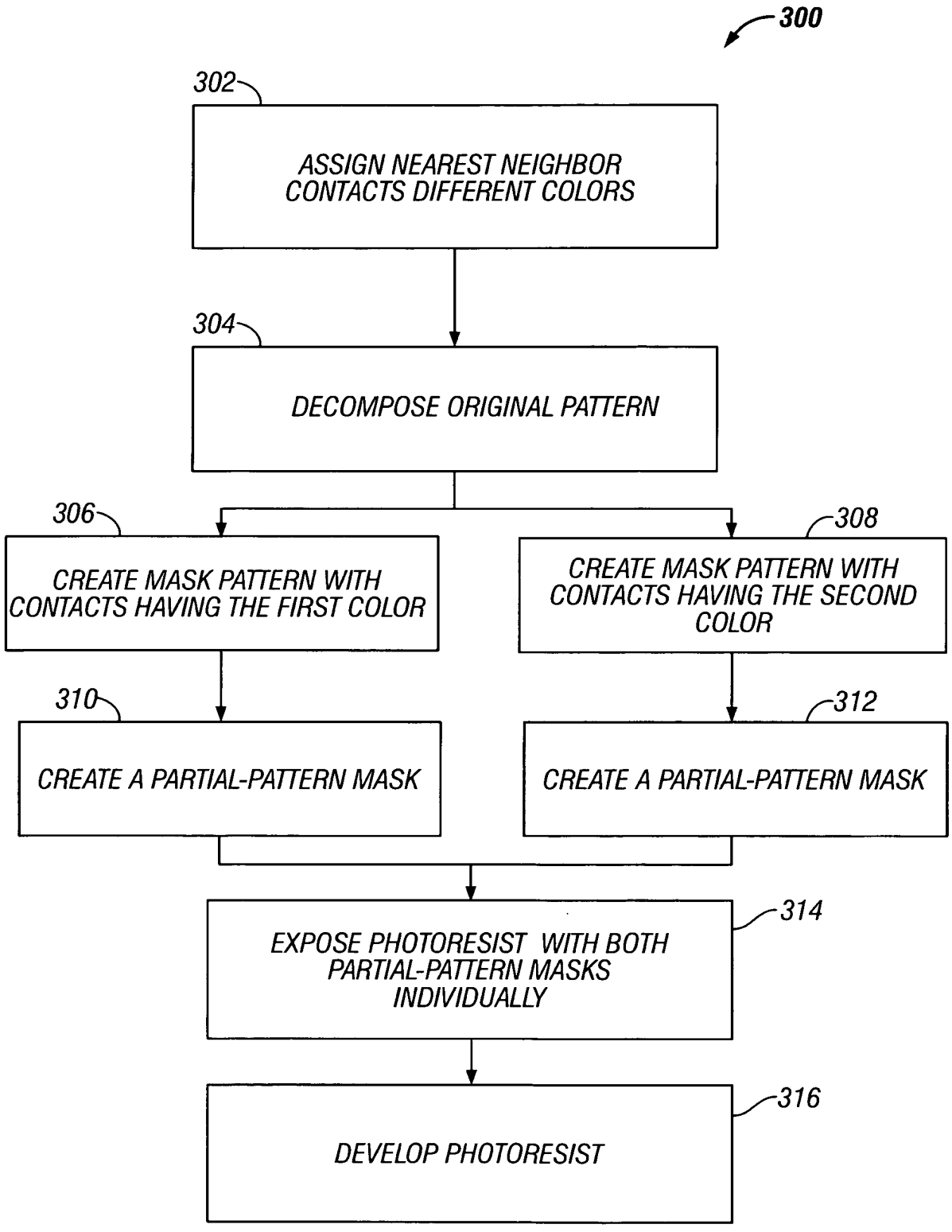
300
302
ASSIGN NEAREST NEIGHBOR CONTACTS DIFFERENT COLORS
304
DECOMPOSE ORIGINAL PATTERN
306
CREATE MASK PATTERN WITH CONTACTS HAVING THE FIRST COLOR
308
CREATE MASK PATTERN WITH CONTACTS HAVING THE SECOND COLOR
310
CREATE A PARTIAL-PATTERN MASK
312
CREATE A PARTIAL-PATTERN MASK
314
EXPOSE PHOTORESIST WITH BOTH PARTIAL-PATTERN MASKS INDIVIDUALLY
316
DEVELOP PHOTORESIST

FIG. 3

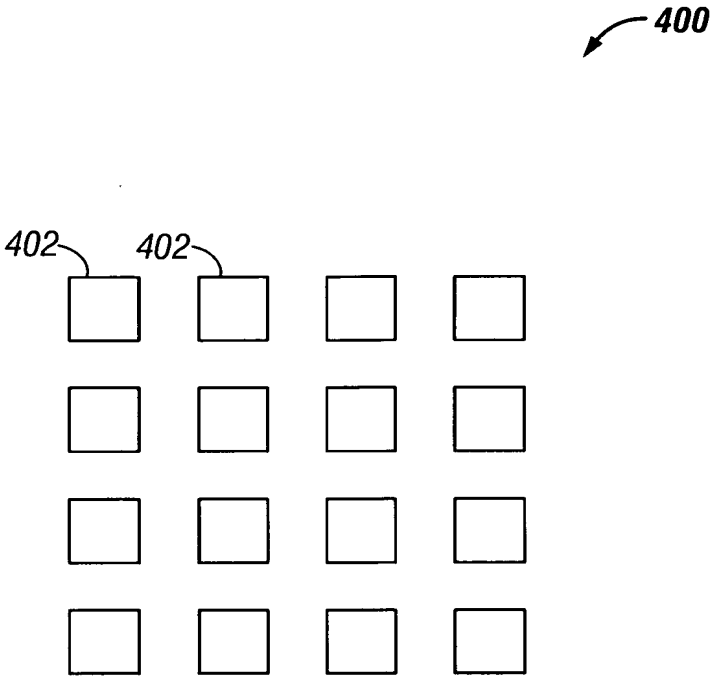

FIG. 4

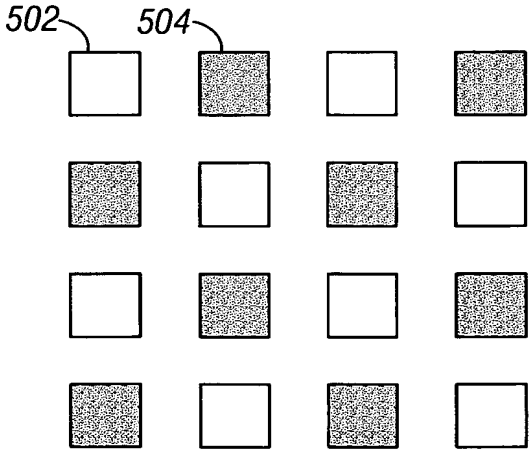

FIG. 5

5/5

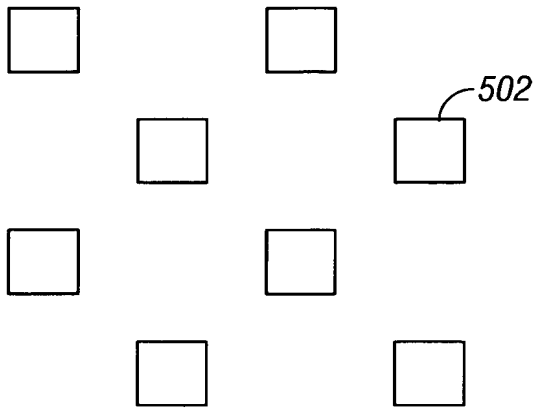

FIG. 6A

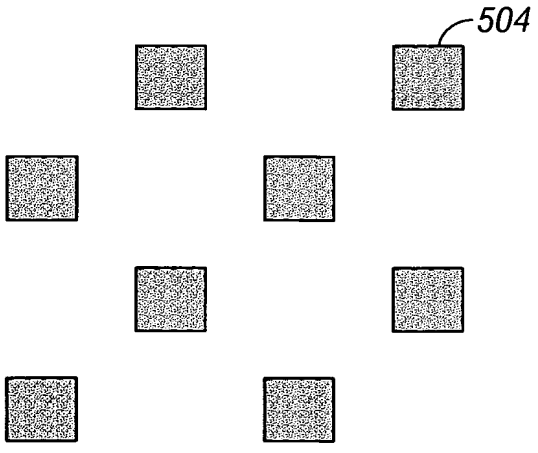

FIG.6B